SYNOPSIS

ON

Impact of Emotional Intelligence and Rationality on Behavioural Biases of Retail Investors in Indian Stock Market

For registration in Doctor of Philosophy in Business Management

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I. TOPIC OF THE STUDY

Impact of Emotional Intelligence and Rationality on Behavioural Biases of Retail Investors in Indian Stock Market

II. Introduction

Behavioural Finance is the study of psychological factors and its influence on investor's behavior. It is an emerging topic in India. The idea is to look at the reasons why people make choices they do. Behavioural finance is all about trying to understand biases in human behavior when it comes to money. It focuses on the fact that investors are not always rational, have limits to their self-control, and are influenced by their own biases. However it is not simple, and there is an entire subject dedicated to behavioural finance. It is relatively a new field of study. With the simplified assumptions of Traditional Finance i.e., investors are rational and market is efficient, it does a commendable job for a while but with the change of time, these theories were found to be failed to explain some anomalies in the world of finance that prompted the need and development of new field i.e., Behavioural Finance. The researchers considered behavioural finance as more reasonable and resort to behavioural finance instead of Traditional finance (Bortoli, Costa, Goulart & Campara, 2019) as it considers more realistic assumptions and have a practical approach in the real world (Asab, Manzoor & Naz, 2014) . It also emphasised the unusual behaviour of Investors as well as market, it gives answers to why market didn't behave in the desired manner and why Investors behave in a certain way. Individuals find it difficult to follow a rational approach for their course of action, they feel difficulty in perceiving lot of Information and analysing and synthesizing the information for decision making that makes Investors depending upon biases. Behavioural finance expects individuals to be more influenced by their emotions or reasonable biases rather than taking the rational approach. People are not always rational just like the market is not always efficient. There are several researches which vindicates that a large number of investors make decisions not based on logic but emotion which is usually seen in cases where the investors purchase stocks at higher price based on speculation and then sell off at lower price under panic. So, behavioural finance helps us in avoiding the decisions driven

by emotion that ultimately leads to losses. There are biases that influence our investment decisions. Although it is impossible to eradicate them altogether, one can take steps to recognize biases and safeguard from its shortcomings. The study of influence of behavioural biases is one of the important aspect of behavioural finance. Behavioural finance captures the role of behavioural biases in investor decision making. Biases are the essential and integral part of behavioural finance. Humans are affected by these biases and they sometimes ignore empirical data and thus lost profitable opportunities because of their prejudices and illogical inclinations. These biases affect all types of Investors directly or indirectly and sometimes they are not even aware of it. These different biases can affect all types of decision making even day to day decisions but have specific implications in relation to finance and Investment and thus lead to sub optimal decision. Comprehending behavioural finance will assist the stakeholders with the insights to make them actually aware about the emotion driven buying and selling by the investors in the market and also to make them apprised of that Investors are not rational always & they exhibit various biases which can deviate their Investment success This includes Individual Investors, Institutional investors, Financial analyst, regulators, portfolio fund managers. Stakeholders can develop awareness about the different biases and the impact they have on Investor behaviour and it can be used as a basis for creating more efficient trading strategies. Behavioural Finance can with stand all the potential pitfalls and give a scope for a better financial decision making. It equips professionals with insights of Investor's mind.

III. REVIEW OF LITERATURE

Overall 56 research papers related to Investor's behavioural biases, Emotional intelligence and Rationality of investors have been reviewed in which conceptual as well as empirical research papers are also included and 2 books have also been reviewed for the same. It comprises studies across the globe as well as in the Indian context. For the purpose of review, the literature has been divided under three sub headings i.e., 'Investor's Behavioural Biases', 'Emotional Intelligence and Investor's Behavioural Biases' and 'Rationality & Investor's Behavioural Biases'.

Investor's Behavioural Biases

Behavioural Biases can be defined as the psychological dysfunctions in the mind of Investors at the time of Investment. Irrationality and biases do impact decision making of Investors. These biases are necessary to study to reduce the effects of them while making investment decisions. Although completely eliminating behavioural Biases is quite difficult but if the investor comprehends biases and their effects on investment behaviour, it is possible that investors can take a better rational decision and minimise the negative effects of biases.

Zahera and Bansal (2018) reviewed many papers and finally they inferred that behavioural biases do exist in different investors among different countries and also mentions the causes of its presence and suggested solutions to overcome it. Investors do get deviates from logic and rationality & they possess various behavioural biases (Jain, Walia & Gupta, 2019). Cunningham (2002) gave a model of how prices are formed and reduces the effects of

cognitive biases. There are about 16 behavioural biases namely Overconfidence, Disposition effect, Herding, Mental Accounting, Confirmation bias, Hindsight Bias, House money effect, Endowment effect, Loss Aversion, Framing, Home Bias, Conservatism bias, Regret Aversion, Anchoring, Availability & Representativeness bias. It is a bias that exists when Individual is much more confident about his knowledge and skills in a way that investor believes his ideas with unrealistic high optimism. Investors become overconfident about earning extraordinary returns & ignores real risk factors (Bouteska & Regaieg, 2018). Generally it is assumed that people who have more knowledge and maximum information becomes overconfident but Bouteska and Regaieg (2018) cited Gervais and Odean (2011) and Jung (2009) who on the contrary, confirmed that inexperienced Investors are more prone to overconfidence bias than their experienced counterparts. Males are more vulnerable to this bias than females (Baker, Kumar, Goyal & Gaur, 2018) (Lin, 2011) (Kumar & Goyal, 2016). Aren, Aydemir and Sehitoglu (2016) didn't find any behavioural difference on the basis of gender, however, the study emphasized on correlation of trading experience & overconfidence bias and according to them both increases simultaneously.

(a)Representative Bias: It was first of all introduced by Kahneman and Tversky in 1970. Kahneman and Tversky (1970) explored the reason why people depend on this bias unintentionally and gave First reason as lack of forecasting ability and other reason is people's belief that some samples can represent the whole universe. Investor takes decisions on the basis of these samples & thus, avoid complex calculations People do prefer investing in companies they know or the local companies as this bias make people emphasis too much on recent experience and with which they are familiar (Sarkar & Sahu, 2018). Investors are prone to this bias when the similarity of objects confuses people's thinking regarding the probability of the outcome. It is a propensity of people processing the information on the basis of part experience.

(b) Availability Bias: According to the findings of Kahneman and Tversky in 1979, if an Investor has to select some stock or have to take decision, he will feel those thought which are easily obtainable and easily recallable (Bashir, Rasheed, Rafter, Fatima & Maqsood, 2013). The reactions that will come more quickly in mind will be more likely to be chosen. Khan (2015) also conferred that availability bias has a significant and strong impact on the investment decision of Individual Investors. Investors get depends on the information that is easily available & avoid analysing alternative which can lead to judgemental errors (Raut & Kumar, 2018).

(c) **Anchoring Bias:** Anchoring Bias makes people predicting from inception, they then modify to have a final outcome. Similarly Shah, Ahmad and Mehmood (2018) conferred that Investors only uses initial piece of Information while making Investment decision and everything revolves around that 'anchor' or the initial information. Likewise, Raut and Kumar (2018) posits similar findings for inexperienced investors and said that the new investors make most of their decisions on the basis of reference point or anchor. Investors are inclined to this bias and will buy shares at higher price or may sell shares at lower, thus resulting in lost opportunities (Jain *et al.*, 2019).

(d) Herding Bias: When Investors invests in where others Investors are investing, they are susceptible to herding bias. The Investors having this bias imitate the actions of other Investors, they most of the times seek advices from brokers, colleagues and friends for making any Investment decisions (Jain *et al.,* 2019). It can be identified as the propensity of Investors to behave similar and emulating each other. This sort of behaviour is believed to be based on information one gets from some acquaintance (Aren *et al.,* 2016). Chang, Chen & Jiang (2012) described two types of herding -rational herding and irrational herding and associated the first one to individual investors and latter one to institutional investors.

(e) Mental accounting Bias: This bias has been introduced by Richard Thaler. This Behavioural bias occurs when individuals tend to treat each element in the portfolio separately. Mental accounting bias describes the process where people classify and assess financial results (Jain *et al.,* 2019). Three components of mental accounting receive the most attention. This first captures how outcomes are perceived and experienced, and how decisions are made and subsequently evaluated. A second component of mental accounting involves the assignment of activities to specific accounts. The third component of mental accounting concerns the frequency with which accounts are evaluated and `choice bracketing'. (Thaler, 1999)

(f) Conservatism Bias: Individual investors are often deviated from logics, sometimes they don't trust their knowledge or may be they don't have full information. Conservatism bias explains that investors want their investments to be safe and that's why whenever they heard about a bad news they instantly convert their stocks into cash as they want to play really safe. Investors find it difficult to accept and process new information and they usually feel mental stress if the information is complex (Thomas, 2018).

(g) Regret Aversion Bias: It is a bias which actually arises from the feelings of regret of taking any wrong decision. Investors prone to this bias avoid taking important decisions as they think they won't be able to take an optimal decision and they will lose in the future. Most of the investors don't want to admit their mistakes that ultimately lead to regret aversion bias (Jain *et al.,* 2019). People do take regret into consideration when making any financial decision as fear of regret plays a significant role in motivating or discouraging someone to take action.

(h) Self –Attribution Bias: It can be defined as people's inclination of giving credit to themselves for success and blaming others for failures. It is a tendency of people to claim an unreasonable degree of credit for any good outcome and resisting any responsibility for a bad outcome (Mushinanda & Velluri, 2018). Self-attribution bias is a long-standing concept in psychology research and refers to individuals' tendency to attribute successes to personal skills and failures to factors beyond their control. Recently, this bias is also being studied in household finance research and is considered to reinforce investor overconfidence (Hoffmann & Post, 2014).

(i) Disposition effect: It is the reluctance of investors to sell assets that have lost value and greater likelihood of selling assets that have made gain (Baker, Kumar & Goyal,

2019). According to disposition effect, individuals regret for holding a losing stock for a long time and selling a profitable stock too early. The disposition effect combines the prospect value function with the focus on individual stock gains and losses to predict that investors are relatively more willing to sell the winners than the losers in their portfolios. There may be times when selling the winner is the optimal wealth-maximizing decision. But this is generally not the case when stock price changes move in trends (called return momentum) and when capital gains are taxed (Chen *et al.*, 2007).

Baker *et al.* (2018) found the existence of various biases among Indian Investors and further adding up, it was found that financial literacy has a negative correlation with disposition and herding bias and it is positively correlated with mental accounting bias. Jain *et al.* (2019) found herding bias, loss aversion bias and overconfidence bias as most influential using fuzzy analytic hierarchy process and concluded that Investors should be equipped with the better understanding of biases that may influence their investment decision making. Baker *et al.* (2018) explored the relationship between big 5 personality traits and behavioural biases by analyzing the data from 515 stock investors and using SEM it was found that traits of neuroticism, extroversion and conscientiousness have strong relationship with behavioural biases and openness has a significant relationship with mental accounting and no relation of agreeableness trait. Tauni, Majeed, Mirza, Yousaf and Jebran (2017) concentrated on the personality traits of Advisor and conferred that trading activity is increased among the investors when advisor personality is featured with openness, agreeableness and conscientiousness by analyzing the data given from 314 stock advisors. Boutseka and Regaieg (2018) found that loss aversion bias has a negative impact on the economic performance of the US companies and overconfidence positively affects the market performance of Industrial firms but negatively impacts the performance of service firms in US, using 6777 quarterly observations of the USA's Industrial and service firms and for analysis Ordinary least square regression was used**.**

Emotional Intelligence and Investor's Behavioural Biases

In simple terms, Emotional Intelligence refers to a person's ability to manage his own emotions and others emotions in a way to use them productively. Studying Emotional Intelligence has become essential because some people are extremists and they don't know how to deal with different emotions in an intelligent manner. Emotional Intelligence enable us to ascertain how to utilize moods and emotions in an beneficial manner (Ameriks, Wranik & Salovey, 2009). If we go in the history of Emotional intelligence, in the period 1970-1989, the field of cognition and affect emerged to ascertain how emotions interacted with thought process. In 1983, Gardner posits theory of multiple intelligences describing an intrapersonal and interpersonal intelligence, the term Emotional Intelligence was in use that time, But still there was no explicit definition of Emotional Intelligence till the time Mayor and Salovey gave a precise definition in 1990 (Dhani & Sharma, 2016).

Mayer and Salovey (1990) elucidated EI as the ability to identifying, monitoring, interpreting and integrating emotions for productive reasons. Elaborating the significance of this concept, Goleman (1995) regarded EI as twice important than IQ (Intelligence

quotient) and conferred that people who are Emotionally intelligent can control their emotional impulses more than the people who are not. Mayor and Salovey (2009) cited their own paper Mayer and Salovey (1997) where he put forth the ability model, this model is comprised of 4 dimensions i.e., perceiving emotions, facilitating thought, understanding emotions and regulating emotions. Daniel Goleman, in contrary, posits the mixed model and also propounded 5 Prominent dimensions in 1998 i.e. Self-awareness, Self -Regulation, Motivation, Empathy, and Relationship Management. To test the competencies of ability model advocated by Mayer and Salovey, MSCEIT (Mayor, Salovey, & Caruso's EI Test) was designed in 2002 (Mayer and Salovey, 2009). There are many models of EI, and no model refutes each other (Schutte *et al.*,1997). Among many models of EI, Goleman's EI performance Model, MSCEIT and Bar-On's EI Competencies Model, are the notable ones. Bar-On (2006) cited Bar-On (1997) which states that Emotional Intelligence is actually related to self-awareness and understanding others also, and also it involves adjusting to the environment to be more successful (Bar-On, 2006). Bar-On designed Emotional Quotient Inventory (EQ -i), to test the social and emotional intelligence of people of 16 years and above (Ugoani, Amu & Kalu, 2015). Schutte *et al*. (1997) discusses various measures given by different Researchers and deduce 33-item scale based on 62 items of Mayer and Salovey (1990). (Jordan, Ashkanasy & Hartel, 2003) suggested the definition of Emotional Intelligence given by Mayer and Salovey (1997) to be a standard definition for scholars today.

Cited in Mayor and Salovey (2009), the definition given by Mayer and Salovey in 1997,

"Emotional Intelligence is the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge and to reflectively regulate emotions so as to promote emotional and intellectual growth."

16-item scale has also been reviewed which has been validated by Wong and Law to test the emotional intelligence. This scale has been used by various researchers in their study in context of India as well. Wong and Law used the dimension- self emotion appraisal, other's emotion appraisal, use of emotion, and regulation of emotion (Law, Wong & Song, 2004). This scale is popularly known as WLEIS (Wong and Law Emotional Intelligence Scale).

As the EI climbs up, it will have a positive impact on academic performance, greater ability to converse and vice versa and also humans with high Emotional Intelligence possess better social relations (Mayer, Caruso & Salovey, 2009). Emotions affects every type of decisions it is not only related to financial decision but it can positively or negatively affects every decision, a person must be aware and be able to handle emotions if he wants a positive impact (Aren & Hamamci, 2020). Dulewicz, Higgs and Slaski (2003) elaborated the connection between EI, Morale and stress. Similarly, Ciarrochi, Dean and Anderson (2002) exhibits the same link and founded that Emotional perceptive people are more likely to be impacted by stress than others and they further said that EI is still in its infancy stage and there is need to explore much about it. Further adding to the significance of EI, It was elaborated that high Emotional Intelligence can add up the value

in the self-development of leaders (Lazovic, 2012) (Ugoani *et al.,* 2015). Gabel and Dolan (2011) found that a person having more EI has the more ability for cultural adjustments. The similarities were found in the findings of Sharma (2012). Sharma (2012) determines the cross-cultural reliability and validity of the Emotional Competence Inventory (ECI-2) in Indian context, The ECI is a multi-rater instrument that provides direct report, and peer ratings based on emotional competencies explained by Goleman in 1998. Emotions are considered as real & it do affects decision making. To make Emotions beneficial for oneself, one should be aware of his/her emotions (Aren & Hamamci, 2020). EI do exist in all Individuals & their decision making (Webb, Donno & Killgore, 2014) (Johnsi & Sunita, 2018). Ameriks *et al.* (2009) used famous MSCEIT and regression analysis on 1250 respondents including IRA account holders and 401(k) investors of USA, and concluded that people high in openness may invest in equity higher only if they get good advice from some acquaintance and further added up that men do trade more than women but women high in EI trade more than men low in this and finally suggested that moods and emotions can be useful for Investors if he finds the way to manage it effectively while choosing the alternative.

Although much more analysis is required for measuring the influence of 'Emotionality' on investment behaviour nonetheless, this may really help the investment industry in dealing with different Investors and their different level of emotional intelligence. Charaani (2016) argued that the traditional Finance was replaced by behavioural finance because it was unable to pinpoint what an investor should do in case of 'Bubbles' &' Crashes'. During these times, he suggested that Investors need to manage their emotions and avoid trusting the majority and he also proposed that there is need of improvement of EI among Investors to nibbling the effect of behavioural biases. The same was suggested by Ameriks *et al.* (2009). Johnsi and Sunita (2019) identified the connection between emotional intelligence and behavioural biases among Investors in their latest review of literature with the use of regression analysis and stratified sampling technique on 120 investors investing in NSE or BSE. In the review of Johnsi and Sunita (2019) studies related to India & some other regions of the world are included. For their study, they selected 4 prominent dimensions of Goleman (1995) i.e., self- Awareness, Motivation, Empathy and social skills, analysed 12 biases and sample size was 120 and it was conducted in India and they agreed that there is a significant correlation between these dimensions and behavioural biases in India. According to their findings, Social skills is positively correlated with overconfidence, self-awareness & Empathy are negatively correlated with overconfidence and it was concluded that an Investor who possess self-awareness & social skills will be more prone to behavioural biases. Ahmad (2018) also uses two similar dimensions i.e. Regulation of emotion and Use of emotion and other 3rd dimension was Self emotion appraisal. The data was analysed with the help of Hierarchical Latent Variable Models in PLS-SEM by using the reflective-formative type constructs on 455 investors from Pakistan stock exchange and the study revealed the impact of emotional intelligence on investor behaviour (IB) in Pakistan Stock Exchange (PSX) and observed this as significant and positive. It was also identified that Dimensions of EI especially self-emotion appraisal & regulation of Emotions have significant relation with behaviour of Investors of Pakistan. The limitation of this study is that it is restricted

to Pakistan only. Tanvir, Sufyan and Ahsan (2016) conferred that humans possess emotions and biases and sometimes they are not even conscious of it.

Rationality and Investor's Behavioural biases

Rationality is the state or quality to think or act on the basis of some logic. Ideal Rationality says that while taking a decision one must think rational, one must analyse different options on the basis of reasoning. The Most influential concept in 'Management thought i.e. Rationality' is believed to be originated in Greek Philosophy. The Greeks used the word 'Logos', 'Logos' is referred to as 'rational cosmos' by some researchers and as 'Rational animals' by Aristotle, Romans depicted it as 'Ratio'& ultimately, it switched into the concept of Rationality (Rutgers, 2015). In Actual, there is not a single belief in Greek philosophy.

Later on, Rationality was given a novel meaning and associate it with the product of human reason .By the course of Nineteenth century, 'rationality and science & technology' was seen interconnected & Science &Technology become the prototype of Rationality. Kuhn (1962) imparted that science is not general, but cumulative, but he doesn't fully condemn scientific rationality. Many other enlightenment Researchers observed different concepts of Rationality, For Instance, Cleaver (2000) emphasised on Ecological rationality and didn't saw rationality from the perspective of logic, but from the viewpoint of human mind and its interaction with real world. Powell (2018) discussed 'Economic & Behavioural Rationality' and also elaborated the two kinds of strategizing which he named as 'Romantic & Mercenary' and as stated in the paper, these both strategies are partially complete and he gave the justification that humans cannot adopt complete strategies as they are always surrounded by insurmountable hindrances. The similar findings were of Behavioural Decision Research. Henry Mintzberg in 1976 deduced 3 stages of rational decision making i.e. Problem Identification, seeking relevant information & evaluating alternative solutions. In 1992 Drucker extended these into 6 steps (Gupta, 1992). Further, the prominent prospect theory pioneered by Kahneman and Tversky (1979) focussed on the psychological factors which they termed as 'Biases'& also how it affects people when they have to make a choice especially in risky situations. The matching findings were also reviewed in Herbert Simon's Influential work that has made him one of the major contributor in the area of 'Rational Decision-making'.

Simon with his colleague puts light on human thinking & human decision making & its limitations. Simon uses the term 'Bounded Rationality' in place of 'Rationality' in 1957 and described that one cannot be fully rational while choosing an alternative because there are always constraints that one is bounded with (Simon, 1976). Simon demonstrated that Managers should take the decision with full information & knowledge and on the basis of that only they can take Optimum decision but due to lack of resources, for example, shortage of time, finance etc, they are forced to take only satisfactory decision and have to resort to sub optimal decision. Simon worked with many esteemed researchers like James March, Allen Newell. Like Simon's conclusion the same conclusions was conferred by Lin (2011) and Mushinada (2018) where they proposed that people do violate

assumptions of rationality & that fails the 'Ideal Rationality'. However, their work also includes 'emotion' that is generally considered out of scope while studying rationality. The behaviours are different because of their difference in nature & they have limitation of thinking ability that makes people not to behave fully rational (Kumar & Goyal, 2016). Simon (1976) also gave a way from substantive rationality to procedural rationality. Substantial rationality is the rationality of the decision and procedural rationality is the rationality of the process which is used to arrive at a decision. Simon also used the term 'satisficing' with the bounded rationality, which he later on used in his concept of 'Procedural Rationality'. According to the theoretical view point Bounded Rationality is considered negative as it condemns ideal Rationality, the procedural rationality is viewed as Simon's positive contribution to the Idea of rationality both the concept are just different perspective of the same thing & can be regarded as complementary to each other (Barros, 2010). After reviewing various interpretations of rationality, it can be said that these are all the different perceptions of Rationality. The most significant concept we found in most of the studies was 'Bounded Rationality'. Rationality and bounded rationality both are weaved together as an essential part as reviewed by Sent (2018). We cannot have one without the other as they both seems to be entangled together. Contini and Morini (2007) tested Bounded Rationality in job changing behaviour of 660 Employees in Italy and they explored that Employees behave according to Simon's bounded Rationality. Sebora and Kenser (1996) studied connection between Bounded rationality and CEO selection process.

Lin (2011) supported the relationship between rationality and behavioural biases on 430 samples in Taiwanese stock market by using Structural Equation Modeling. We have reviewed rationality and how its concept evolved. Most of the researcher used Mintzberg's investor's rational decision-making procedure that involves demand identification, Information search and evaluating the alternatives. Rational decision Theory also explains that a logical way is followed while selecting the decision and the motive is to choose the best alternative. Nevertheless, In real world, decision makers are subjected to limitations, known as 'biases' as already discussed and that prompt the Simon's concept of Bounded Rationality (Sent, 1997). Kahneman and Tversky (1979) pioneered the prospect theory and accepted that some psychological errors may affect the selection process. The relevant information can reduce the irrationality but it cannot completely eliminate it (Mukherjee & De, 2019).

Mushinada and Veluri (2018) inspected the relationship of Rationality with overconfidence and self-attribution bias in 5 major cities of India including Hyderabad, Bengaluru, Kolkata, New Delhi, Mumbai with 384 respondents and with the use of Structural Equation Modelling, it was strongly stated that biases do exists in Indian Investors despite investor's rationality and while preparing portfolios the fund manager should be aware of these biases and try to 'de-bias' them. Rubinstein (2000) emphasised on 'Minimally rational markets' and argued that humans are irrational in specific ways and Investor's overconfidence leads to irrational decision making. Kumar and Goyal (2016) and Lin (2011) both explored the relation of rationality and overconfidence, disposition and herding bias. They also selected the same stages of Mintzberg for their

research, Kumar and Goyal (2016) uses the SPSS, SEM, ANOVA, t-test for analysis of 386 samples in India & finally interpreted a positive correlation of stage 2 i.e. information search with overconfidence & no correlation was found between any stage and herding bias, Contradictory to the findings of Mushinada and Velluri (2018) the study of Kumar and Goyal (2016) concluded that Investors follow a rational decision making. Likewise, Lin (2011) also uses SEM for analysing sample size of 430 of investors investing in Taiwan Stock market. Lin (2011) conferred positive correlation between stage 1 and overconfidence and 2nd stage negatively affects disposition indirectly & also found that young female are more affected by herding behaviour while picking the choice in Taiwan stock market, Contrary to this, Kumar and Goyal (2016) & Mushinada and Velluri (2018) found that male investors are more prone to herding bias in India. The findings of Kumar and Goyal (2016) and Lin (2011) were similar that there was no stage which is directly related to herding bias.

Research Gap

After reviewing the literature, it was found that behavioural finance is still in the growing stage in India. The following Research gap were identified:

- Behavioural Biases have been extensively explored in developed countries but developing countries like India has relatively finite number of studies on this topic. There is a need to further explore the Investor behaviour in the dynamic and ever changing globalized investment environment.

- Different aspects of Emotional intelligence (EI) have been studied with respect to different areas of HR but the variable Emotional Intelligence with respect to Investors is still an unexplored area. The present study strives to study the emotional intelligence of investors in India.

- Rationality is an important variable. The standard finance assumes that investors in the market are rational but in actual rationality is a rare phenomenon as evident from the review of literature. There is a dearth of literature on investor's rationality in India as well as in other countries. So the present study aims to explore rationality among investors in India.

IV. RATIONALE OF THE STUDY

The aforementioned literature substantiates that recent researches have recognised the significance of studying behavioural factors to get a more realistic insight of Investors together with stock market but there is a lot of scope to investigate the area of behavioural biases. Behavioural finance helps us in understanding why people usually do not make the decisions that they are supposed to, just like why the market acts unreliably at times. The review will be significant to varied groups of the society. The review can assist Investors, Financial advisors and portfolio fund managers by making them aware about the various biases and their influence on Investor's behaviour and they can try to reduce the ill effects of it. Financial advisors and fund managers and

Financial Analyst can develop an understanding of market that why the market doesn't behaved in an desired manner. They can also learn to control their own biases and can prove to be a smart mentor to their clients by guiding them to the right direction keeping in mind various factors. The knowledge of behavioural finance and behavioural biases can restrict corporates from issuing those securities which are not giving desired benefits. To ascertain the factors affecting investor's behaviour can be useful for the Regulators to know the perception of public towards savings and investments and they are interested to know the financial awareness, issues and challenges faced by the people in making right investment and ways to increase participants in the stock market. Stakeholders can develop awareness about the different biases and their impact on the behaviour while making investment decisions. The investors are different in various ways some are risk averse, some are risk seekers, some investors do a lot of analysis while investing some simply go with the herd, It is evident that the concept of Modern Finance can assist every stakeholder to identify their own as well as other's natural biases and avoid making illogical and irrational Financial investment decisions. Behavioural Finance attempts to identify the reasoning behind Investor's behaviour and as well as the role of emotions and cognitive errors in determining Investor's behaviour (Jain et al., 2019) So, it will be absolutely beneficial for conducting research on this area.

V. RESEARCH OBJECTIVES-

1. To determine the presence of behavioural biases among retail Investors in Indian Stock market

2. To measure emotional intelligence of retail investors in Indian stock market and its impact on their behavioural biases.

3. To analyse the extent of rationality among retail investors in Indian stock market and its impact on their behavioural biases.

VI. Research Methodology

1. **Research Design** –Keeping in view the objectives of the study, the study will follow a descriptive research design that describes characteristics of the sample population.

2. **Type of Data**- Primary data would be collected in order to achieve the aforementioned objectives. The theoretical foundation of the study will be based on various secondary sources which will include magazines, books, journals and the latest updates will also be collected from the newspaper and internet etc.

3. **Sampling Plan**

The following plan is intended for obtaining required data

- **Sampling Unit** –

  Target sample would be retail investors investing in the Indian stock market

- **Sampling Area**-

  To achieve aforesaid objectives, the study would be conducted in Haryana and National Capital Region.

- **Sample size-**

  To achieve the aforementioned objectives the sample size chosen would be 1000 (The final sample size would be decided on the basis of pilot study and number of variables that would be used in the final questionnaire of the study).

4. **Research instruments-**

   A well-structured questionnaire for retail investors will be framed to achieve the aforementioned objectives. A pilot survey will be conducted to ascertain the reliability & validity of different statements used in the questionnaire.

5. **Research Tools** -

   Statistical tools like Mean, Standard deviation, ANOVA, Regression Analysis/ Structural Equation Modeling etc. would be would be used as per the objectives and nature of the data.

VII. ORGANIZATION OF THE STUDY

Chapter 1: Introduction – This chapter discusses the concept of behavioural finance and behavioural biases and its evolution would be discussed in this chapter. The variables would be introduced in this chapter.

Chapter 2: Review of Literature – This chapter would provide the conceptual framework by reviewing the existing literature related to behavioural biases, emotional intelligence and rationality. It would also assess the impact or relationship of rationality and emotional intelligence on behavioural biases of investors.

Chapter 3: Research Methodology –The proposed chapter would be divided into parts like Research design, sampling design , sample size & research instrument.

Chapter 4 and Chapter 5: Analysis and Interpretation of Data- The analysis of collected data will be done by using various analytical tools.

Chapter 6 :Conclusion and Recommendations – This chapter would reason out the study by providing conclusions, findings, recommendations & limitations of the proposed study.

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